Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims

~~Claim~~ 1. (Currently amended)[[:]] ~~Process~~ A process for ~~the automatic control of the~~ automatically controlling a thickness of an extruded ~~films~~ film, ~~that comprises the following features~~ comprising:

[[-]] ~~Measurement of the~~ measuring thickness profile values of the extruded film ~~just extruded (8)~~ with ~~the help of~~ a thickness-measuring probe ~~(12)~~ that is moved along ~~the~~ a surface of the film substantially perpendicular (x) to ~~the~~ a conveying direction (z) of the extruded film, ~~(8). The~~ the thickness-measuring probe ~~records~~ recording for each measuring cycle (MZ) a thickness profile (P) of the film ~~(8)~~ at least across parts of ~~the~~ an expansion of the film ~~(8)~~ perpendicular (x) to ~~its~~ the conveying direction (z)[[,]];

[[-]] ~~Transmitting~~ transmitting the measured values to a control unit ~~(14, 15, 17)~~[[,]];

[[-]] ~~Storage of~~ storing the transmitted measured values ~~underlying the thickness profiles~~ in a storage unit ~~(14)~~[[,]];

[[-]] ~~Provision of~~ providing statistical values of the film thickness ~~(5)~~ using a computer ~~(14), where the computer (14) takes~~ by taking into account the measured values or information

derived ~~therefrom~~ <u>from the measured values</u> using a definite

number of measuring cycles (MZ)[[,]]<u>;</u>

[[-]] ~~Determination of the~~ <u>determining</u> deviations in the

statistical values of the film thickness ~~(5)~~ from a target

value[[,]]<u>;</u> and

[[-]] ~~Generating~~ <u>generating</u> control commands to a device for

controlling the film thickness<u>,</u> ~~(5)~~

~~characterized in~~

[[-]] <u>such</u> that during a predetermined time-frame at ~~the~~ <u>a</u>

start of the extrusion process, measured values or information

derived ~~therefrom using or for a greater number of measuring~~

~~cycle~~s <u>from the measured values</u> is made accessible to the

computer ~~(14)~~ <u>for a greater number of measuring cycles</u> than ~~those~~

<u>is</u> recorded by the thickness-measuring probe ~~(12)~~ in a time-frame

of ~~similar~~ length <u>similar to the predetermined time-frame</u> during

~~the~~ <u>a</u> normal operation<u>,</u> and that

[[-]] ~~that~~ the computer ~~(14)~~ takes into account ~~these~~ <u>the</u>

measured values while providing the statistical values,

[[-]] ~~wherein~~ at least a part of ~~these~~ <u>the</u> measured values

~~originate~~ <u>originating</u> from the storage unit ~~(14)~~, [[-]] ~~that~~ <u>which</u>

makes accessible <u>the</u> measured values or <u>the</u> information derived

~~therefrom~~ <u>from the measured values</u> to the computer ~~(14)~~,

[[-]] ~~wherein these~~ <u>the</u> measured values or <u>the</u> information

derived ~~therefrom originate~~ <u>from the measured values originating</u>

<u>only</u> from measuring cycles that were recorded in another

extrusion process in which the deviations in the film thickness from the target value lay within an acceptable tolerance range.

~~Claim~~ 2. (Currently amended) [[:]] ~~Process~~ The process pursuant to claim 1, ~~characterized in that~~ [[-]] wherein the thickness-measuring probe ~~(12)~~ is moved during ~~a~~ the predetermined time-frame at the start of the extrusion process more quickly along the surface of the extruded film ~~(8)~~ than in the normal operation, [[-]] and ~~in doing so~~ determines for each time unit the measured values from a larger number of measuring cycles than ~~the~~ a number of measuring cycles used in the normal operation, [[-]] and makes ~~these~~ the measured values accessible to the computer ~~(14)~~.

~~Claim~~ 3. (Canceled) [[:]]

~~Claim~~ 4. (Currently amended) [[:]] ~~Process~~ The process pursuant to claim 1, ~~characterized in that various~~ wherein weighting factors are assigned to the measured values or the information derived ~~therefrom~~ from the measured values using different measuring cycles with which ~~the~~ a contribution of the measured values or of the information derived ~~therefrom~~ from the measured values to the statistical values is defined.

Claim 5. (Currently amended)[[:]] ~~Process~~ The process pursuant to claim 4, ~~characterized in that these~~ wherein the weighting factors are changed at the start of the extrusion process.

Claim 6. (Currently amended)[[:]] ~~Process~~ The process pursuant to claim 1, ~~characterized in that~~ wherein the measured values or the information derived ~~therefrom~~ from the measured values using other extrusion processes that are stored in the storage ~~device (14)~~ unit are assigned to ~~the~~ process parameters that prevailed when ~~they~~ the measured values were recorded.

Claim 7 (Withdrawn) Device for the automatic control of the thickness of the extruded film (8) having the following features:

- a thickness-measuring probe (12) for measuring the thickness profile of the film just extruded (8) that is moved along the surface of the film (8) substantially perpendicular (x) to the conveying direction (z) of the extruded film (8). The thickness measuring probe (12) records for each measuring cycle (MZ) a thickness profile (P) of the film (8) at least across parts of the expansion of the film (8) perpendicular (x) to its conveying direction (z),

- transmitting the measured values to a control unit (14, 15, 17),

- a storage unit (14) for recording the measured values and the information derived therefrom,

- a computer (14) for providing statistical values of the film thickness (5) taking into account measured values or information derived therefrom using a definite number of measuring cycles (MZ)

- wherein even the deviations in the statistical values of the film thickness (5) from a target value can be determined using the computer (14),

- a device (17) for generating control commands to a device for controlling the film thickness (5)

characterized in

- a computer (14) using which it is possible to take into account, during a predetermined time-frame at the start of the extrusion process, measured values or information derived therefrom using or for a greater number of measuring cycles than those recorded by the thickness-measuring probe in a time-frame of similar length during the normal operation,

- a storage unit (14) in which it is possible to store measured values or information derived therefrom using measuring cycles that were recorded in another extrusion process

- communication means between the storage unit (14) and the computer (14) that provides to the computer (14) during a

predetermined time-frame at the start of the extrusion process

at least a part (14) of the measured values or information

derived therefrom which the computer (14) then takes into

account for this time-frame.

~~Claim~~ 8. (Canceled) [[:]]

~~Claim~~ 9. (Currently amended) [[:]] ~~Process~~ The process pursuant to

claim 2, ~~characterized in that various~~ wherein weighting factors

are assigned to the measured values or the information derived

~~therefrom~~ from the measured values using different measuring cycles

with which ~~the~~ a contribution of the measured values or of the

information derived ~~therefrom~~ from the measured values to the

statistical values is defined.

~~Claim~~ 10. (Canceled) [[:]]

~~Claim~~ 11. (Currently amended) [[:]] ~~Process~~ The process pursuant to

claim 2, ~~characterized in that~~ wherein the measured values or the

information derived ~~therefrom~~ from the measured values using other

extrusion processes that are stored in the storage ~~device (14)~~ unit

are assigned to ~~the~~ process parameters that prevailed when ~~they~~ the

measured values were recorded.

~~Claim~~ 12. (Canceled)[[:]]

~~Claim~~ 13. (Currently amended)[[:]] ~~Process~~ The process pursuant to claim 4, ~~characterized in that~~ wherein the measured values or the information derived ~~therefrom~~ from the measured values using other extrusion processes that are stored in the storage ~~device (14)~~ ~~unit~~ are assigned to ~~the~~ process parameters that prevailed when ~~they~~ the measured values were recorded.

~~Claim~~ 14. (Currently amended)[[:]] ~~Process~~ The process pursuant to claim 5, ~~characterized in that~~ wherein the measured values or the information derived ~~therefrom~~ from the measured values using other extrusion processes that are stored in the storage device ~~(14)~~ are assigned to ~~the~~ process parameters that prevailed when ~~they~~ the measured values were recorded.

Amendments to the Abstract

Replace the abstract with the following replacement abstract:

~~The present invention relates to a~~ A process for the automatic control of the thickness of an extruded film ~~(8). The purpose of the invention is to lower the~~ lowers deviations in the film thickness ~~of the film~~ more quickly after the start of the ~~extrusion~~ process.

The process ~~involves the measurement of~~ includes measuring the thickness profile of the extruded film ~~just extruded (8) by means of~~ with a thickness-measuring probe ~~(12)~~. The ~~thickness-measuring~~ probe ~~(12) is moved~~ moves along the surface of the film substantially perpendicular (x) to the film conveying direction (z) ~~of the extruded film (8)~~. The ~~thickness-measuring~~ probe ~~(12)~~ records for each measuring cycle (MZ) a thickness profile (P) of the film ~~(8)~~ at least over parts of the expansion of the film ~~(8)~~ perpendicular (x) to ~~its~~ the conveying direction (z).

~~The process pursuant to the present invention is characterized by the fact that during~~ During a predetermined time-frame at the start of the extrusion process, measured values or information derived therefrom ~~using or for a greater number of measuring cycles~~ is made accessible to ~~the~~ a computer ~~(14)~~ for a greater number of measuring cycles than ~~those~~ is recorded by the ~~thickness-measuring~~ probe ~~(12)~~

in a time-frame of similar length during ~~the~~ normal operation. ~~and~~
~~that the~~ The computer ~~(14)~~ takes into account these measured values
while providing the statistical values.

~~(Figure 1)~~

~~[see source for figures]~~

For the examiner's convenience, a clean text version of the replacement abstract (150 words) is presented below:

A process for the automatic control of the thickness of an extruded film lowers deviations in the film thickness more quickly after the start of the process. The process includes measuring the thickness profile of the extruded film with a thickness-measuring probe. The probe moves along the surface of the film substantially perpendicular (x) to the film conveying direction (z). The probe records for each measuring cycle (MZ) a thickness profile (P) of the film at least over parts of the expansion of the film perpendicular (x) to the conveying direction (z). During a predetermined time-frame at the start of the extrusion process, measured values or information derived therefrom is made accessible to a computer for a greater number of measuring cycles than is recorded by the probe in a time-frame of similar length during normal operation. The computer takes into account these measured values while providing the statistical values.